# VA in Tennessee



FISCAL YEAR 2018 (OCTOBER 2017 - SEPTEMBER 2018)

## **Energy Sales**

SOLD

kilowatt-hours OF ELECTRICITY TO 61 municipals **22** co-ops

PROVIDED

kilowatt-hours OF ELECTRICITY TO million HOUSEHOLDS through the LPCs

SERVED

kilowatt-hours OF ELECTRICITY TO 465,000 Commercial & Industrial Customers\* through the LPCs HOME TO

DIRECTLY Customers PURCHASING BILLION kilowatt-hours OF ELECTRICITY

REVENUE

Power Revenue **IN TENNESSEE 2017** 

operating revenue

#### Service Area



#### **Power Generation and Transmission**

In Tennessee, TVA operates 19 hydroelectric dams, four coal-fired power plants, two nuclear power plants, ten natural gas-fueled facilities, with a combined generating capacity of more than 20,398 megawatts.

substations Q switchyards X MILES of transmission

- Hydroelectric plants: Boone, Cherokee, Chickamauga, Douglas, Fort Loudoun, Fort Patrick Henry, Great Falls, Melton Hill, Nickajack, Norris, Ocoee 1, Ocoee 2, Ocoee 3, Pickwick Landing, South Holston, Tims Ford, Watauga, Watts Bar, and Wilbur.
- Coal-fired plants: Allen, Bull Run, Cumberland, Gallatin, Johnsonville and Kingston. Two coal plants ceased operations during the year – Johnsonville in December 2017 and Allen in March 2018.

<sup>\*1.15</sup> billion kilowatt-hours to outdoor lighting customers. LPC = local power company

- » Nuclear plants: Sequoyah and Watts Bar.
- » Natural gas-fueled facilities: the Brownsville, Gallatin, Gleason, and Johnsonville sites host combustion turbine plants. John Sevier has a combined cycle plant, and the Lagoon Creek and Allen sites host both a combustion turbine and a combined cycle plant.
- » Pumped-storage hydroelectric plant: Raccoon Mountain.
- TVA operates seven solar facilities in Tennessee: a 1-megawatt facility at the Allen Combined Cycle plant in Memphis, a 31-kilowatt facility at the Adventure Science Center in Nashville; a 10-kilowatt facility at Cocke County High School in Newport; an 9-kilowatt facility at Morgan County Vocational School in Wartburg; a 97-kilowatt facility at Finley Stadium in Chattanooga, a 20-kilowatt facility at Gibson County High School in Dyer, and a 32-kilowatt facility at the Bridges Center in Memphis.

## Land and Water Stewardship \_

- TVA manages 33 reservoirs in Tennessee. These include Boone, Cherokee, Chickamauga, Douglas, Fort Loudoun, Fort Patrick Henry, Great Falls, Melton Hill, Nickajack, Nolichucky, Normandy, Norris, Ocoee 1, Ocoee 2, Ocoee 3, Raccoon Mountain, South Holston, Tellico, Tims Ford, Watauga, Watts Bar and Wilbur along with eight small reservoirs in the Beech River watershed in West Tennessee and portions of Kentucky, Pickwick and Guntersville reservoirs. These reservoirs have a combined surface area of about 300,000 acres and about 7,000 miles of shoreline.
- TVA manages recreational, natural and cultural resources on more than 170,000 acres
  of public land around its Tennessee reservoirs and partners with communities, local, state,
  and regional stakeholders to improve water quality and aquatic biodiversity, shoreline
  conditions, recreation, wildlife, and habitats on lands, reservoirs, and their tributaries.
- Tennessee residents enjoy camping, fishing, boating, swimming and other recreational opportunities provided by TVA reservoirs, as well as economic benefits of recreation and tourism. TVA maintains 38 day-use recreation areas and 45 stream access sites and manages more than 82 miles of trails.
- The TVA visitor center at Raccoon Mountain Pumped-Storage Plant and Laurel Point hosted more than 28,586 visitors in 2018. Raccoon Mountain is TVA's largest hydroelectric facility. The Norris Dam Visitor Center—overlooking the powerhouse, Norris Reservoir and a marina—received over 19,617 visitors in 2016.
- There are unstaffed visitor centers at South Holston, Fort Patrick Henry, Melton Hill, and Douglas Dams.

- Interpretive signage was added to the overlook at Melton Hill, and a new installation was added at the unstaffed visitor center at Douglas Dam. Both are accessible year-round.
- TVA manages a recreation area at South Holston Dam, offering picnicking, walking trails and fishing opportunities.

## River Management \_\_\_

- TVA maintains the structural, seismic and hydraulic integrity of 19 hydroelectric dams;
   11 non-power dams; two small overflow detention dams at John Sevier Fossil Plant on the Holston River and Doakes Creek on Norris Reservoir; and one pumped-storage plant near Chattanooga.
- TVA manages flows to support thermal compliance at our coal-fired and nuclear plants.
- TVA owns seven locks in Tennessee (six main locks and one auxiliary lock), serving about 110 Tennessee ports and terminals. About 16 million tons of cargo moved through the facilities in fiscal year 2018.
- TVA operates its dams and reservoirs in Tennessee as part of an integrated multipurpose reservoir system to provide numerous stakeholders a variety of benefits which
  can include: navigation, flood risk reduction, low-cost hydropower, water supply, water
  quality, and recreational opportunities. At Chattanooga, which is prone to flooding
  because of its location just upstream from where the Tennessee River flows through the
  narrow passes of the Cumberland Mountains, operation of TVA's flood-control system
  has helped prevent about \$7.1 billion in flood damage since its construction.
- About 93 municipalities, 33 industries and six mining companies in Tennessee draw water from the Tennessee River system. Water also is drawn for power plant cooling and irrigation.
- TVA schedules releases of water from the Apalachia, Norris, Ocoee 1, Ocoee 2, Ocoee 3, Tims Ford and Watauga/Wilbur dams to support tailwater recreation in Tennessee.

# **Other TVA Operations**

Tennessee households achieved million

eSCORE kilowatt-hours 6,020 ENERGY EFFICIENCY SAVINGS | SELF-AUDITS

24,117

 $2,\!639$  new homes were built and 623 existing homes were incentivized to install Smart Electric Technologies.

#### **Tax Equivalent Payments**

**PAID IN LIEU OF TAXES** 

#### Personnel

**TVARETIREES** 

**Economic Impact** 

\$6.5 billion **INVESTED** 

# **TVA Suppliers**

SUPPLIES PURCHASED \$4 **FROM TENNESSEE VENDORS** 

billion non-fuels materials and services